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# ABSTRACT

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This invention pertains to a siloxane resin composition comprising  $R^1SiO_{3/2}$  siloxane units,  $R^2SiO_{3/2}$  siloxane units and  $(R^3O)_bSiO_{(4-b)/2}$  siloxane units wherein  $R^1$  is an alkyl group having 1 to 5 carbons, hydrogen, or mixtures thereof;  $R^2$  is a monovalent organic group having 6 to 30 carbons;  $R^3$  is a branched alkyl group having 3 to 30 carbons, b is from 1 to 3; and the siloxane resin contains from 2.5 to 85 mole percent  $R^1SiO_{3/2}$  units, 2.5 to 50 mole percent  $R^2SiO_{3/2}$  units and 5 to 95 mole percent  $(R^3O)_bSiO_{(4-b)/2}$  units. The siloxane resin is useful to make insoluble porous resin and insoluble porous coatings. Heating a substrate coated with the siloxane resin at a sufficient temperature effects removal of the  $R^2$  and  $R^3O$  groups to form an insoluble insoluble porous coating having a porosity of 1 to 60 volume percent and a dielectric constant in the range of 1.5 to 3.0.